Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20054

In the Matter of	)	
	)	
Advanced Television Systems	)	MM Docket No. 87-268
and Their Impact upon the	)	
Existing Television Broadcast	)	
Service	)	

To: The Commission

PETITION FOR RECONSIDERATION

Gulf California Broadcast Company ("GCBC") respectfully submits this Petition for Reconsideration of the Commission's Fifth Report and Order, FCC 97-116, released April 21, 1997 and its Sixth Report and Order, FCC 97-115, released April 21, 1997, in the above-captioned proceeding.

Background

1. GCBC is the licensee of KESQ-TV, channel 42, Palm Springs, CA.

2. In the above-referenced decisions, the FCC adopted a Table of Allotments for digital television ("DTV"), rules for initial DTV allotments, and procedures for assigning DTV channels. [1/] The Sixth Report and Order specifically assigned DTV channel 52 for GCBC's DKESQ-TV, Palm Springs. Id. at Appendix B-10. It also specified a power limitation for DTV channel 52 of 64.4 KW (at 1087 meters HAAT). Id.

[1/] The terms "frequencies" or "channels" generally refer to the 6 MHz spectrum block currently used to provide a single NTSC program service or to the equivalent 6 MHz spectrum block to be used for DTV services (HDTV, multiple DTV programs, data or other types of communications).

Discussion

I. THE ALLOCATION OF DTV CHANNEL 52 TO KESQ-TV IS UNLAWFUL

3. The Sixth Report and Order's allocation of channel 52 for DKESQ-TV and its specification of a 64.4 KW power limitation (at 1087 meters HAAT) effectively emasculates KESQ-TV's analog channel 42 service area. That unlawful decision should be reconsidered and a more fair and equitable allocation should be made. See 47 USC 307(b) (FCC is obligated by is governing statute to make a "fair" and "equitable" allocation of frequencies and power).

4. Beginning nearly three years ago, GCBC initiated a costly upgrade of KESQ-TV's service, designed to enhance and improve its award-winning program service to Palm Springs and surrounding areas. On September 9, 1994, GCBC filed an application to change KESQ-TV's transmitter site (to Pine Mountain, near Palm Springs) and to increase power. See BPCT-940909KG. [2/] The KESQ-TV service area under the existing CP now exceeds 28,000 square kilometers and the population served is now over 2.5 million persons. Id., Form 301 (page 28). See Appendix A hereto. [3/]

[2/] The CP was granted in 1995 and an extension of the CP was granted on June 9, 1997 (see BMPCT-970508KE).

[3/] GCBC has contracted with the Pine Mountain site owner and is awaiting the FCC's final DTV allocation before constructing the upgraded, state-of-the-art facility on Pine Mountain.

5. In last year's Sixth Further Notice of Proposed Rule Making, MM Docket No, 87-268, released August 14, 1996, the FCC allotted DTV channel 43 to KESQ-TV and specified 110.1 KW of power (at 1087 meters HAAT). Id. at Appendix B-8. Even that allocation, while more reasonable than the current one, miscalculated and misstated KESQ-TV's service area and population served from the Pine Mountain site. That DTV allocation (channel 43) would have allowed DKESQ-TV to serve only 1.2 million persons, rather than the 2.5 million persons served under KESQ-TV's current CP. [4/]

6. The FCC's latest allocation of DTV channel 52 for DKESQ-TV is, however, an effective emasculation of KESQ-TV's service area and populations. The Sixth Report and Order proposes to limit DKESQ TV's power on DTV channel 52 to only 64.4 KW at 1087 meters HAAT (compared to the CP's 1820 KW on analog channel 42), **resulting in a population loss of sixty-eight (68) percent** (1.6 million persons). Id. at Appendix B-10.

7. Moreover, the service area replication "shortfall" is actually even more extreme than indicated in the Sixth Report and Order. Although that decision concedes that DKESQ-TV's transitional operation on channel 52 would serve only 859,000 persons, GCBC's consulting engineers estimate that interference, primarily

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[4/] The 2,551,722 million persons estimated in GCBC's 1994 Form 301 application compares with 1,471,000 persons estimated when using the Longley-Rice allocation refinement. Using either figure, however, the Sixth Report and Order's allocation of DTV channel 52 for DKESQ-TV would reduce the service area population so dramatically as to effectively emasculate KESQ-TV's coverage.

from NTSC channel 52 at Corona, CA, would result in even fewer people being served -- **less than one-third of the population to be served by DTV channel 52 than by KESQ-TV's analog channel 42 from the Pine Mountain site**. See Appendix B at 2. Thus, rather than replicating, as claimed, only 97% of KESQ-TV's service area population -- which is problematic enough -- the Sixth Report and Order's allocation of channel 52 to DKESQ-TV proposes to replicate only about thirty-two (32) percent of the population served by KESQ-TV's (analog) channel 42.

II. CH. 54 OR ANOTHER APPROPRIATE CHANNEL SHOULD BE ALLOTTED

8. On reconsideration, the FCC should allot another appropriate channel for DKESQ-TV, at substantially higher power, that will more fairly and equitably replicate its service from the Pine Mountain site.

9. For example, DTV channel 54 could be allocated without any other change in the allotment table issued in the Sixth Report and Order. See Appendix B hereto at 4-5. The allotment of that long "unbuilt" NTSC channel [5/] would result in a better than 53% improvement in population served by DKESQ-TV as compared

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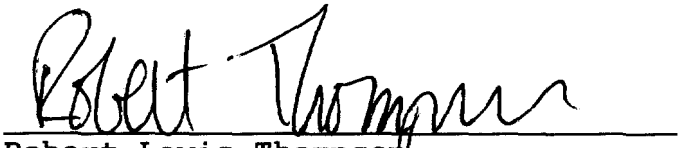
[5/] The channel 54 Avalon proceeding has been pending since 1986 and, even if the longstanding comparative impasse is broken and the proceeding eventually concluded, would be unlikely to result in the construction of an NTSC-54 facility; rather, any future permit holder for NTSC-54 at Avalon, CA likely would proceed to request an construct its digital facility. (Avalon is located on Santa Catalina Island, 26 miles west of the Southern California coastline.)

to the Sixth Report and Order's proposed channel 52. Id., Appendix B at 4. Moreover, the total interference "given" by a DTV channel 54 allotment for DKESQ-TV would be reduced at least 23% in area and more than 50% in population, compared with a DTV channel 52 allotment. Id., at 4-5.

10. In sum, another allocation for DKESQ-TV is imperative. It appears that channel 54 can be allocated for DKESQ-TV with no other changes to the Table proposed in the Sixth Report and Order. Accordingly, the FCC should reconsider its decision and propose a new DTV channel for DKESQ-TV, with substantially higher power, that would more fairly replicate its analog channel 42 service to 2.5 million persons from the Pine Mountain site.

Respectfully submitted,



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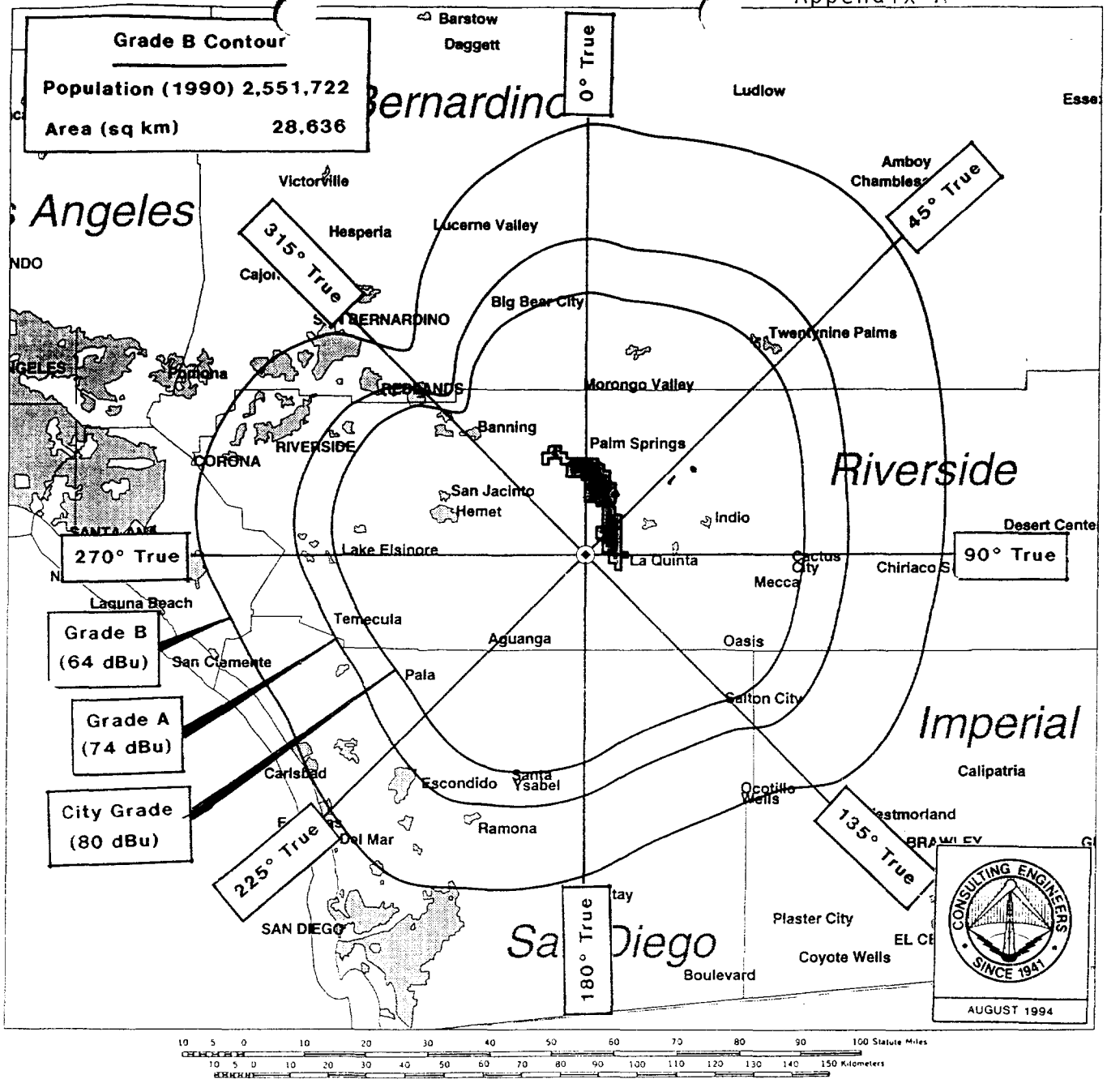
June 13, 1997



PREDICTED COVERAGE CONTOURS

GULF-CALIFORNIA BROADCAST COMPANY

STATION KESQ-TV

PALM SPRINGS, CALIFORNIA

CH 42 1820 KW (MAX-DA) 1087 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

du Treil, Lundin & Rackley, Inc.
A Subsidiary of A.D. Ring, P.A.

ENGINEERING STATEMENT
IN SUPPORT OF PETITION FOR RECONSIDERATION
PREPARED FOR
TELEVISION STATION KESQ-TV
PALM SPRINGS, CALIFORNIA
NTSC CHANNEL 42

This Engineering Statement was prepared on behalf of KESQ-TV, Palm Springs, California (NTSC Channel 42), in support of a Petition for Reconsideration concerning the FCC's digital television ("DTV") Sixth Report and Order ("Sixth Order"). This proceeding concerns advanced television systems and their impact on the existing television broadcast service. In the Sixth Order, the FCC allotted digital television (DTV) channels to eligible stations throughout the country. The KESQ-TV Petition for Reconsideration requests the Commission to revise the DTV allotment table such that KESQ-TV is allotted DTV Channel 54 instead of DTV Channel 52. It is demonstrated herein that this is a superior arrangement of DTV allotments, which will not otherwise affect the FCC DTV allotment table.

KESQ-TV's Proposed DTV Allotment

KESQ-TV was allotted Channel 52, with an average ERP of 64.4 kW, for its transitional DTV operation. Independent coverage and interference calculations for

this channel utilizing a Longley-Rice allocation tool similar to the FCC's* reveals the following:

Interference to Proposed DKESQ-TV, Channel 52		
Station	**Estimated Population (1990)**	**Interference Area (sq. km)**
KDOC-TV, Anaheim, CA, NTSC-56	--	3
KVEA, Corona, CA, NTSC-52	--	2145
KUSI-TV, San Diego, CA, NTSC-51	--	35
Approximate total NTSC interference (considering common interference areas)	**634,000**	**2170**
Approximate total DTV interference (considering common interference areas)	**0**	**0**

Based on the NTIA program, the noise-limited service area of DKESQ-TV within the FCC predicted Grade B contour of KESQ-TV includes a total population of 1,471,000. As indicated above, interference will be caused to a population of approximately 634,000 persons, primarily from co-channel station KVEA. This over 43% of the potential FCC/Longley-Rice service area for DKESQ-TV. This results in a net population within the DKESQ-TV service area of 837,000 persons.

The attached Figure 1, a map generated by the NTIA program, illustrates the cause of the significant

*A working version of the FCC's allotment software is not generally available. Computer allocation tools are available for this purpose through the Department of Commerce's National Telecommunications and Information Agency (NTIA). Although this software has proven to have some limitations, it is the only known allocation tool generally available for this purpose. This firm's proprietary Longley-Rice software was also employed to confirm certain aspects of the NTIA results. The Longley-Rice tools that are available were used with good engineering judgement to conduct allocation studies.

interference to DKESQ-TV on Channel 52. It shows the calculated noise-limited service area for DKESQ-TV on Channel 52. Areas where the DKESQ-TV signal is below the minimum for service are indicated. The clear or unshaded area indicates where DKESQ-TV would provide interference-free service. The interference to DKESQ-TV is shown with "+" symbols. As indicated, this region of interference occurs in the densely populated San Bernardino/Riverside area of Riverside and San Bernardino Counties.

With respect to "interference-given" by the Channel 52 DKESQ-TV allotment, these figures are summarized in the table below:

Interference–Given from Channel 52 DKESQ-TV Allotment	
Station	**Interference Area (sq. km)**
KVEA, Corona, CA, NTSC-52	3,634
KUSI-TV, San Diego, CA, NTSC-51	27
Approximate total NTSC interference (considering common interference areas)	**3,661**
Approximate total DTV interference (considering common interference areas)	**0**
Approximate total interference (considering common interference areas)	**3,661**

The total interference given by the DKESQ-TV allotment is estimated to be 3,661 square kilometers within which an estimated 1,415,000 persons reside based on the 1990 Census. It will be shown below how these numbers improve with the use of Channel 54.

Possible Alternative Channel 54

Channel 54 has been identified as a viable alternative to Channel 52 for DKESQ-TV, which requires no other change in the allotment table issued with the Sixth Order.† The primary sources of interference to Channel 54 are summarized in the table below:

Interference to Channel 54 DKESQ-TV Proposal		
Station	**Estimated Population (1990)**	**Interference Area (sq. km)**
NEW, Avalon, CA, NTSC-54‡	--	910
KAJB, Calipatria, CA, NTSC-54	--	1054
DKFMB-TV, San Diego, CA, DTV-55	--	25
Approximate total NTSC interference (considering common interference areas)	**119,000**	**1,964**
Approximate total DTV interference (considering common interference areas)	**0**	**25**

As indicated, for DKESQ-TV on Channel 54, it is estimated that a total of 119,000 persons will be affected by interference within a total area of 1,989 square kilometers. This results in an estimated DKESQ-TV service area population of 1,286,000. This is better than a 53% improvement in population served for DKESQ-TV as compared to the FCC proposed DKESQ-TV Channel 52 allotment.

† An average ERP of 64.4 kW using the NTSC directional antenna is assumed for the Channel 54 allotment.
‡ The granted Channel 54 Avalon-CA application facility (FCC File No. BPCT-860210KH) was employed for the purposes of the study herein.

With respect to interference-given by the proposed Channel 54 DKESQ-TV allotment, the results of the interference analyses are summarized in the table below:

Interference–Given from Proposed Channel 54 DKESQ-TV Allotment	
Station	**Interference Area (sq. km)**
NEW, Avalon, CA, NTSC-54	1,910§
KAJB, Calipatria, CA, NTSC-54	1057
KDOC-TV, Anaheim, CA, NTSC-56	8
Approximate total NTSC interference (considering common interference areas)	**2,967**
Approximate total DTV interference (considering common interference areas)	**0**
Approximate total interference (considering common interference areas)	**2,967**

The total interference given by the Channel 54 DKESQ-TV allotment proposal is estimated to be 2,967 square kilometers within which an estimated 698,000 persons reside based on the 1990 Census. Compared to the Channel 52 proposed DTV allotment, this is a 23% reduction in interference area and more than 50% reduction in interference population.

It is thus concluded that a DTV allotment for DKESQ-TV on Channel 54 has far superior service and interference characteristics than the FCC Channel 52

§ More than 50% of the predicted interference to NEW, Avalon-CA occurs over the Pacific Ocean.

du Treil, Lundin & Rackley, Inc.
A Subsidiary of A.D. Ring, P.A.

allotment. And, this is without disruption of the Sixth Order allotment table.

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Figure 1

FCC PROPOSED KESQ-TV DTV CHANNEL 52

PALM SPRINGS, CALIFORNIA

du Treil, Lundin & Rackley, Inc. Sarasota, Florida